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Theme C. Creativity, creative class and urban development

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Building new places of the creative economy The rise of coworking spaces

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Abstract

The late 2000s have seen the emergence of a new kind of workplace: the coworking space. As of February 2013, 2500 spaces had been identified worldwide. This paper endeavors to situate the phenomenon within the existing theory of the creative, urban economy, and to serve as a platform for discussion and further research. Coworking spaces (CS) are regarded as "serendipity accelerators", designed to host creative people and entrepreneurs who endeavor to break isolation and to find a convivial environment that favors meetings and collaboration. At the beginning of the movement, CS creations were purely private initiatives. The concept has since attracted the interest of media, and CS have been incorporated in larger public programs aimed at the making of the "creative city", which often materializes in the regeneration of decayed industrial neighborhoods. CS are the outcome of the blurring of the frontiers and hybridization processes between technological, economic and social categories. Even if their sustainability and growth potential deserve to be questioned, they are strongly anchored in the workplace landscape of major business cities.

Building new places of the creative economy

The rise of coworking spaces

Creativity is not something that can be simply imported into the city on the backs of peripatetic computer hackers, skateboarders, gays, and assorted bohemians but must be organically developed through the complex interweaving of relations of production, work, and social life in specific urban contexts. (Scott 2006, p. 15)

Although well-covered by medias, the spectacular growth of coworking spaces (CS) since 2005 has so far remained almost ignored by the academic literature. By February 2013, *Deskwanted* (a portal dedicated to coworking) reported the existence of 2500 spaces worldwide, located in 80 countries (Deskwanted.com 2013).

A co-working space is a hosting, working and meeting place for entrepreneurs who are carriers of projects and ideas and wish to share them with others; this place is powered by a specific animation intended to create links inside and outside of the community of co-workers. The room and equipment layout, as well as the specific animation model installed, are studied in order to encourage meeting, collaborating, discussing and working (...) Through co-working, collaboration between actors is encouraged and in this way an innovating ecosystem is generated on the local level.

www.creativewallonia.be (accessed 21 June 2013)

The present paper is exploratory and should be regarded as a platform for further research and discussions. It aims at situating the coworking phenomena in a broader context. The emergence of CS is embedded in two interlinked tendencies, the rise of a so-called "creative economy" (Florida 2002), and the digitization of the economy (Malecki and Moriset 2008), which drive profound changes in the production and consumption of space and places dedicated to creative work (section 1). "The rise of the creative class" (Florida 2002) has materialized in the emergence of urban startups and "lone eagles" – self-employed knowledge workers – who seek to find "third places" to break loneliness, and to maximize serendipity and potential interaction with their peers (section 2). Coworking has become a global phenomenon, although it remains concentrated in so-called "creative cities" in advanced economies (section 3). Local authorities support the creation of CS as parts of larger urban development projects aimed at the emergence of "creative districts". This policy is backed by leading technology companies (section 4). However, the sustainability and growth potential of the coworking movement deserves to be questioned, given the low profitability of most facilities (section 5).

1. Context: the rise of the creative class in the digital economy

Coworking spaces are consubstantial of a two-faced economic trend: the emergence of a knowledge economy (Dolfsma and Soete 2006, Neef 1998, Cooke 2002), which simultaneously becomes a digital economy (Malecki and Moriset 2008). Some have written about the emergence of a "cognitive capitalism" (Ascher 2000) or a "digital capitalism" (Schiller 1999). Computers and the Internet have permeated value chains in most business sectors (Porter 2001) and deeply transformed firm organizations (Dutton *et al.* 2004). However, innovation and the creation of value for both consumers and shareholders are not merely a matter of routinely crunching and transmitting data and raw information. Reich (1991) wrote about "symbolic analysts". Florida's best seller (2002) made *creativity* the key word. In the public's eyes, "creative" describes people with some artistic skills in content creation sectors (music, arts, literature, architecture, design, fashion, advertising, media, and entertainment). But the actual scope of Florida's creative class is larger, including software professionals, engineers, scientists, lawyers, and consultants.

Creativity must not be confounded with innovation. Govindarajan (2010) suggests that creativity means "coming up with the big idea", while innovation needs an efficient process of "execution" that will transform the idea in marketable goods and services.

In the context of a globalized economy and increasing competition, creative individuals and innovative industries have been identified as key drivers of sustainable economic growth and prosperity. Training, attraction, and retention of creative people have become a key issue for policy makers and planners. Hence the attention paid to the "creative city" (Scott 2006), which provides creative people and industries with traded and untraded agglomeration externalities. Its core principle is the maximization of opportunities for face-to-face meetings, which make it possible the exchange of *tacit knowledge*.

Following the seminal work of Polanyi (1967), the concept of tacit knowledge has received a great deal of attention from economic geographers (Howells 2002, Leamer and Storper 2001). Many regard the production and exchange of tacit knowledge as "a key determinant of the geography of innovative activity" (Gertler 2003, p. 79). While *codified knowledge* – like "raw information" – may be exchanged and traded at distance through digital platforms and channels, and therefore, be amenable to a process of "ubiquitification"¹ (Maskell and Malmberg 1999), the production and exchange of tacit knowledge include social and cultural components, and require some intimate trust between participants. This level of trust can only be achieved through close contact during in-person meetings, which occur in selected places.

¹ In other papers, it is spelled "ubiquification".

The emergence of urban "lone eagles"

The *lone eagle*² moniker was invented by Phil Burgess, founder of the "Center for the New West", a Denver-based telecommuting think-tank. The expression was popularized throughout academic circles by Beyers and Lindahl (1996). "Lone eagles are knowledge workers who can live and work anywhere, primarily because of advances in telecomputing technologies" (Young 1997).

The rise of lone eagles is the outcome of globalization, digitization, and informational "ubiquitification". The coordination and intermediation power of advanced information technology (IT)³ has driven the institutional fragmentation and geographic splintering of value chains. A massive trend toward outsourcing (Gottfredson et al. 2005) leads firms to become orchestrators rather than owners of skills and know-how. This tendency is compounded by the rise of open innovation (Chesbrough 2003), which means that a single entity can no longer find internally the whole array of resources and talent required to implement a profitable and sustainable flow of innovation. The ultimate stage is the emergence of crowdsourcing and the "wikinomics" (Tapscott and William 2006), which sees single, well-defined entities of innovators and producers being replaced or complemented by myriads of contributors.

The tendency toward outsourcing and subcontracting, associated with ubiquitous computing, favor the growth of micro-enterprises, self-employed and freelance knowledge workers. The list of tasks and competencies amenable to this process is virtually endless: music/video production, translation, journalism, design, architecture, legal work, accountancy, consultancy, software, engineering, electronic commerce. Most of these tasks may be performed on computers, without regard on place and geography. Does that mean that knowledge workers are located everywhere? Malecki (2009) suggests that the answer is more complex. The digital economy features patterns of both dispersion and concentration (Moriset and Malecki 2009). If the public attention was attracted by rural "footloose" teleworkers, Burgess himself recognized that lone eagles are primarily concentrated in large urban areas that have been depicted by Florida and his followers as creative class-friendly.

The digitization of the creative class: effects on location and organization

Digital technology has tremendously changed the way and the geography of doing knowledge-based jobs. Drawing boards and cathode ray tube monitors have gone. Creative people now work on notebook computers and tablets, and benefit from a near ubiquitous access to information and data carried by wireless and mobile telecommunications. The rise of on-demand software and cloud computing (Greenfield 2006) means that knowledge workers no longer need to carry heavy software and databases, making devices more portable and versatile.

² *The Lone Eagle* was the nickname of the famous aviator Charles Lindbergh.

³ Primarily: the alliance of computing, telecommunications, and the Internet.

The existence of the Techno-Cloud means that the office is both ubiquitous and dematerialized. The workplace has infiltrated even the most intimate of domestic spaces. Differentiation between home and office, no longer accomplished by material or spatial separation, has become the responsibility of the worker. This renders the traditional social and architectural boundaries of the office obsolete.

(Shepherdson 2009, p. 11)

Ubiquitous computing and telecommunications drive profound transformations of the whole office property industry. On the one hand, large companies seek more than ever to concentrate their brains in mega R&D campuses, such as the Technocentre of Renault in Paris Region, or the "Googleplex" headquarters of Google in Mountain View (CA). Apple is planning "Apple Campus 2" in Cupertino (CA), which might host 13,000 employees by 2016 in a single "spaceship", circular building.⁴ These facilities are designed to maximize in-person interaction between firm's knowledge workers, with an overabundance of open spaces, meeting rooms, and relaxing areas aimed at favoring informal socializing and transversal relations among teams of engineers, designers, and software experts.

On the other hand, workplace for knowledge jobs has never been so flexible and submitted to various kinds of "hybridization". By implementing "desk-sharing" practices, leading firms in the consulting and computer service industries (i.e. Ernst&Young, Deloitte, and IBM) are engaged in a process of downsizing office surface. They acknowledge that at any time, a large share of their employees are absent from the office, work in clients' premises on travel or at home, and remain able to connect easily to the firm's intranet.

Self-employed creative workers, freelancers, and startup creators, are submitted to a similar process. They can work everywhere. However, like Apple's or IBM's employees submitted to desk-sharing and nomadic work, they may lack of social and professional interaction, and meeting opportunities. It is a paradox pointed out by Howells (2012) that ubiquitous digital connectivity often leads knowledge workers to become increasingly isolated. The isolation process may be compounded, Howells suggests, by the finely grained division of labor in creative industries. Hillman (2008), founder of a CS in Philadelphia, summarizes the six main motives of coworking: "1) You're lonely; 2) You need motivation; 3) You love to learn new things; 4) You have no idea what's going on in your region; 5) Your work/life balance is out of whack; 6) Sharing of resources is RAD⁵." Nomadic employees, self-employed people, and small teams of entrepreneurs need well-connected, ergonomic environments, freed from the trouble of large, buzzy open spaces (Des Isnards and Zuber 2008), nevertheless without suffering the loneliness that characterizes home working. In a nutshell, they need a third-place.

⁴ The proposal for the new campus was presented by Steve Jobs to the Cupertino City Council on June 7, 2011.

⁵ RAD: Rapid Application Development

2. Coworking spaces as "third places"

Third places “host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms of home and work.” (Oldenburg 1989)

In 1983, Howard Schultz (Starbucks president and CEO)... had a vision to bring the Italian coffeehouse tradition back to the United States. A place for conversation and a sense of community. A third place between work and home (Starbucks Corp. 2013)

The term of *third place* was coined by American sociologist R. Oldenburg (1989) to describe places out of the home and the office where people use to convene and socialize in a free, informal manner. Oldenburg regards those places as irreplaceable in the production of the urban social fabric. Cafés and Starbucks, McDonald's restaurants, hotel and airport lounges, the hairdresser or barber shop, are typical third places. The use of third places by members of the creative class predates computers and the Internet. In some way, CS are a reminiscence of *cafés littéraires* which flourished in the early 20th Century, such as *Cabaret Voltaire* in Zurich, birth place of Dadaism, or *Le Café de Flore* and *Les Deux Magots* at Saint-Germain-des-Prés (Paris).

CS strictly speaking must not be confounded with telecenters, flexible office facilities, and various kinds of incubators and "startup accelerators". Telecenters are located both in rural or urban areas (Moriset 2011). They are conceptualized as "drop-in" offices, and the degree of professional interaction is usually low. Coworking practices may be sought after, but remain accidental. Flexible office providers (such as Regus) offer office rental solutions, but do not seek to establish any collaborative practice or atmosphere. Incubators are mainly dedicated to startup projects. Their tenants have usually passed through a selection process, which is not compatible with the concept of third place. However, the current hype about coworking pushes founders and managers to implement CS inside incubators and various kinds of entrepreneurial hubs. This process belongs to the global trend of *hybridization* of workplaces and work practices. In the beginning era of the coworking movement (2005-2010), most CS were founded and managed by "pure play" communities. Since, the concept has received wide recognition, and policy makers, city planners, as well as large tech corporations, are supporting the implementation of coworking venues. This complexity is synthesized in Figure 1: CS are entirely dedicated to coworking, while telecenters, business centers, and incubators, are only partly dedicated to this practice.

Table 1. Third place and Coworking space values: a comparison

Third Place by R. Oldenburg	Coworking space values, by Citizen Space (http://citizenspace.us/about/our-philosophy/)
<ul style="list-style-type: none"> ▪ "Neutral ground". Users convene on a free, flexible basis. ▪ "Leveler" : social barriers and economic status are ignored ▪ "Conversation is Main Activity." Humor and wit are welcome. ▪ "Accessibility and Accommodation" ▪ "The Regulars." Give the place its general tone, and help newcomers to feel comfortable with the place and other users ▪ "Low Profile". Third places show no ostentation, are not pretentious. ▪ "A Home Away From Home" Third place users feel a bit like at home 	<p>Citizen Space ... is built on the following values:</p> <ul style="list-style-type: none"> ▪ Openness: We believe in transparency and openness. (...) When ideas are free, everyone benefits. Therefore, we encourage open spaces and discussions. Sorry, no NDAs allowed. ▪ Collaboration: (...) you will meet all sorts of people with all sorts of knowledge. ▪ Accessibility: (...) we must make the effort to be accessible to all. This means that we endeavor to create both a financially and a physically accessible space. ▪ Community: We thrive on connections and mutual support here.

"Accelerators of serendipity", and the primacy of face-to-face contact in a digital economy

Quand nous sommes entourés de gens intéressants, des choses intéressantes arrivent souvent ! (Cowork in Grenoble 2013).⁶

Serendipity production is the core principle of CS. The idea of "accelerating serendipity with coworking" was popularized by coworking pioneer C. Messina, co-founder of Citizen Space in 2006 with B. Neuberg and T. Hunt (Messina 2007).⁷ Serendipity is the opportunity "to make pleasant and unexpected discoveries entirely by chance" (Oxford Dictionary). Actually, people are well aware that frequenting certain places increases the probability of fruitful encounters. The identification of particular serendipity-producing places and events can be tracked in the academic literature for a long time (Gottmann 1971, Bourdieu 1992, Sassen 2001). These authors wrote about the very same concept, that is serendipity production in particular urban environments and events:

Information flows criss-cross at a variety of meeting points, outside formal offices: around luncheon or dinner tables, at cocktail parties, in clubs, in the lobbies of conferences, on selected golf courses, and on TEE trains (Gottmann 1971, p. 329)

⁶ "When we are surrounded by interesting people, interesting events often occur"

⁷ A full interview of Neuberg, Hunt, Chris Messina can be downloaded from this page.

La proximité dans l'espace physique permet à la proximité dans l'espace social de produire tous ses effets (...) en permettant de profiter continûment des rencontres à la fois fortuites et prévisibles qu'assure la fréquentation des lieux bien fréquentés. (Bourdieu 1992, p. 164).

Being in a city becomes synonymous with being in an extremely intense and dense information loop (...) one of its value-added features the fact of unforeseen and unplanned mixes of information (Sassen 2001)

By emphasizing the link between social space and geographic space, Bourdieu sets up the sociological basis of serendipity production. Bourdieu's idea can be linked to the theory of "proximity" (Boschma 2005, Torre and Rallet 2005), which focuses on the combination between different kinds of proximity: physical, organizational, and cognitive. Physical proximity cannot produce its desired effects if it is not complemented by a certain degree of social and/or professional proximity.

Imagine sitting around the table next to a computer scientist, photographer, and lawyer, or sparking an impromptu conversation with a journalist, fashion publicist, and interior designer. At WECREATE, this is our reality (...) despite our diversity, we all share a common thread of curiosity, creativity, and passion (Wecreate 2013)

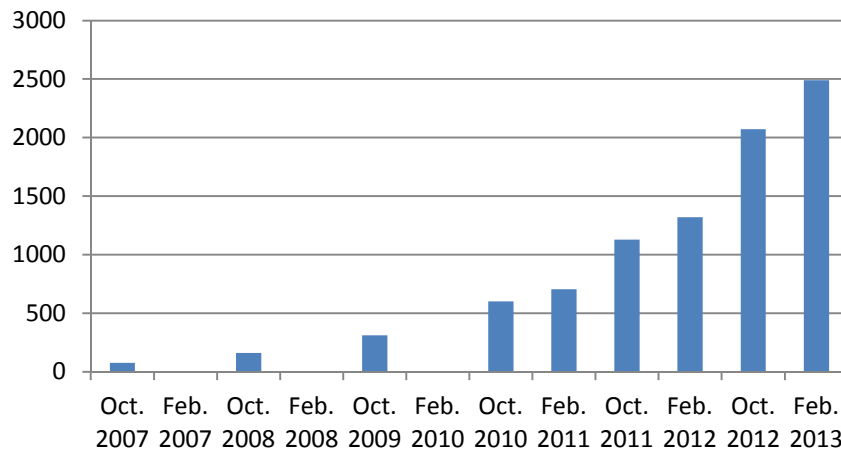
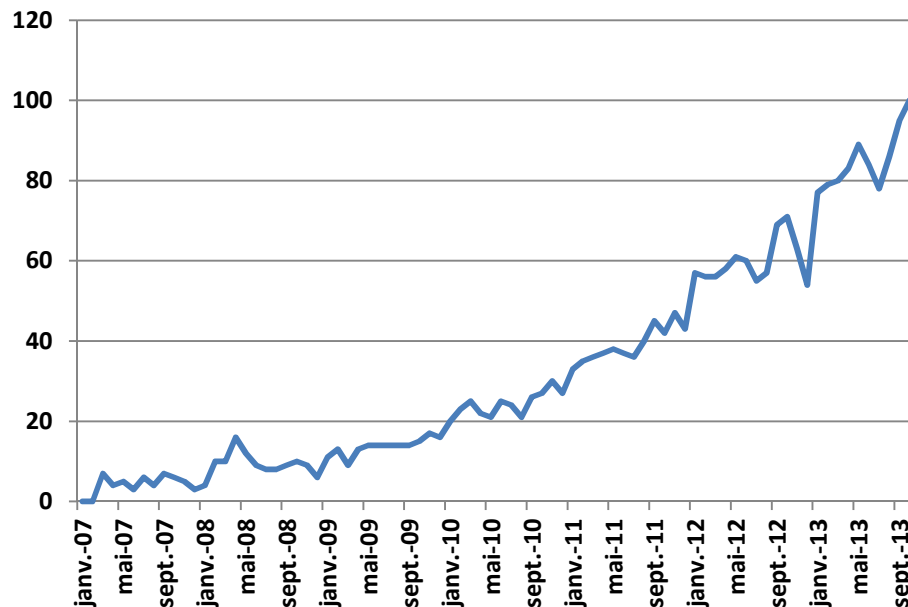
If people who frequent CS are full strangers to each other, no actual coworking will occur. On the other side, if those people do exactly the same job and have the same skills, there will be no matter for serendipity.⁸ This argument sometimes leads CS founders to seek after specialization. Some spaces are dedicated to media (*l'Atelier des Médias*, Lyon). Many target artists and designers (*Studiosmates*, New York, and *Imaginarium*, Lille). Others specialize in high tech (*RocketSpace*, New York).

3. Coworking spaces in cities: a global phenomenon

The worldwide "boom" of coworking

Notoriously born in 2005 in San Francisco (although some isolated attempts are reported in the 1990s), the coworking phenomena has skyrocketed to 2498 spaces by mid-2013, according to *Deskmag*, with nearly a 100% annual increase between 2007 and 2012 (Figure 3). Public and media interest for CS displays a similar trajectory (Figure 4). The paper by D. Fost (2008) in *The New York Times* is worth mentioning.

⁸ A notorious example of fruitful complementarity between people's skills is given by Steve Jobs and Stephen Wozniak, co-founders of Apple. The former has proved a genius of marketing, while the latter was a true computer scientist and tech innovator.

Figure 3. Estimated number of coworking spaces worldwide (adapted from *Deskmag*)**Figure 4. Coworking monthly research trend on Google** (adapted from Google research trend)

The geography of coworking: globalized, although centralized

More in-depth research would be required to apprehend the precise extent of the phenomenon. The main sources of data are the surveys implemented by *Deskmag* (an online magazine dedicated to coworking) and the *Coworking Directory*⁹ on the *Coworking Wiki* (<http://wiki.coworking.com>), a collaborative project founded by coworking pioneers C. Messina and T. Hunt. Since 2012, the *Coworking Wiki* is coordinated by J. Sayles (www.opencoworking.org). Additional data can be found on country-focused platforms such as *Neo-Nomades.com*, which provides an accurate geographic view of the coworking movement in France. Although not very accurate

⁹ <http://wiki.coworking.com/w/page/29303049/Directory>

and not much reliable, these main sources provide a broad, useful vision of the coworking movement's geography. Two contrasted observations can be made:

- the nearly global spread of coworking over the world;
- the emergence of a few cities as "coworking hotspots" boasting a great number of facilities.

A global spread

The coworking directory encompasses 66 countries and 528 cities. Deskwanted.com (2013) reports the presence of 2498 spaces in 80 countries. Coworking has spread over all continents, and all kinds of economies. Advanced economies take the lion's share, with about 1100 spaces in Europe and 860 in North America, but some emerging countries such as Brazil are doing well. The phenomenon does not ignore less advanced economies. It has reached Moldova, Kyrgyzstan, Uganda, and Rwanda (Table 2).

The dispersion pattern is also revealed by the number of regions and localities that host CS within each country. Regarding the USA, the analysis of The Coworking Directory suggests the presence of coworking in 227 localities and all 50 States. All but one¹⁰ European Union's 28 members show at least one venue. Major European countries show a dispersed pattern (Table 3) like the UK (30 different localities), France (27), Germany (24), and Spain (20)

But a concentration in leading "creative" cities

Hundreds of cities host CS, but a few boast a dense network of facilities (Table 4). Concentrations of CS are found in localities often regarded by the literature as textbook examples of creative cities, such as San Francisco, London, Paris, Berlin, Amsterdam, and Barcelona. This concentration scheme seems logical in France and the UK, very centralized countries where Paris and London have for long achieved an overwhelming domination in "quaternary functions". Berlin does not have a significant economic edge over the other German cities – the German urban system is evenly distributed. Its national dominance in the field of coworking tells a different story (Munich has five CS, and most other cities have one or two, at best). To explain this difference, we must acknowledge the specific position of Berlin in cultural and so-called creative industries (Jakob 2010, Lange *et al.* 2008), a long-term historic feature that was reinforced in the wake of the German reunification (*Wiedervereinigung*) in 1990.

By contrast, blue collar cities perform poorly. Detroit (MI), Cleveland (OH), Dusseldorf, and Essen (Germany, in the Ruhr Area), are conspicuously absent from the Coworking Directory.

¹⁰ Cyprus

The abundance of coworking in a given city has obviously something to do with the kind of urban liveliness and vibrancy that makes a place fashionable and attractive for artists, "bohemians", and entrepreneurs in cultural content industries. The presence of a high-tech ecosystem is rather secondary, as shows the prominence of San Francisco, birthplace of the coworking movement, over Silicon Valley strictly speaking.

Table 2. Number of coworking spaces by countries (adapted from *The 2013 Coworking Census*, by Deswanted.com)

North America		Other European Countries		Latin America and The Caribbean	
United States	781	Switzerland	11	Brazil	95
Canada	80	Norway	3	Mexico	21
		Serbia	2	Argentina	19
European Union		Russia and former CIS		Columbia	9
Germany	230	Russia	39	Chile	6
Spain	199	Ukraine	4	Panama	5
United Kingdom	154	Kyrgyzstan	1	Peru	2
France	121	Moldova	1	Costa Rica	1
Italy	91			Dominican Republic	1
Poland	44	West Asia		Paraguay	1
Portugal	42	Israel	12	Puerto Rico	1
Netherlands	39	Turkey	6	Uruguay	1
Belgium	29	Lebanon	4	Venezuela	1
Austria	26	United Arab Emirates	4		
Czech Republic	16	Jordan	1	Africa	
Sweden	15	Pakistan	1	South Africa	5
Greece	10			Egypt	5
Hungary	8	South and East Asia		Nigeria	3
Ireland	8	Japan	129	Senegal	3
Denmark	6	China	22	Cameroon	2
Finland	6	India	18	Morocco	2
Latvia	6	Singapore	15	Uganda	2
Romania	5	Thailand	7	Ghana	1
Bulgaria	4	Hong Kong	5	Ivory Coast	1
Luxembourg	4	Malaysia	4	Mauritius	1
Slovakia	4	Philippines	4	Rwanda	1
Estonia	3	South Korea	4		
Croatia	2	Taiwan	4	Oceania	
Lithuania	2	Indonesia	2	Australia	60
Slovenia	2	Vietnam	2	New Zealand	6
Malta	1				

Table 3. Number of cities with coworking space presence, by countries (source of data: Coworking Directory)

USA	227	Spain	20	Belgium	8
United Kingdom	30	Italy	13	Mexico	8
Canada	28	Brazil	12	Portugal	7
France	27	Argentina	10	Netherlands	6
Germany	24	Australia	9		

Table 4. Major cities hosting coworking spaces (source of data : Coworking Directory)

City	Nb. of spaces	City	Nb. of spaces
San Francisco	30	Sao Paulo	12
(other in The Bay Area)	(16)	Atlanta	11
London	40	Austin	11
New York City	30	Washington D.C. area	11
Berlin	22	Barcelona	11
Paris	20	Tokyo	11
Amsterdam	17	Sydney	9
Seattle	16	Montreal	7
Toronto	15	Madrid	7
Chicago	14	Stockholm	6
Boston / Cambridge	12		

4. Coworking spaces and the making of the "creative city"

At the turn of the 21th Century, the making of the creative city has become the mantra of local policy makers and officials. Kenny (2011) reports a "boosterism" about small business, public officials thinking that "startup companies are a magic bullet that will transform depressed economic regions, generate innovation, create jobs, and conduct all sorts of other economic wizardry". People have forgotten the fate of Manhattan's Silicon Alley where creative people and startups had been occupying former textile workshops and lofts in Tribeca and Soho until most businesses went to bust with the dot.com bubble in the early 2000s (Indergaard 2004). Ponzini and Rossi (2010) suggest that Florida's theory (2002) acted as "intellectual technology" in the hands of local politicians and stakeholders seeking to refurbish and revitalize decayed neighborhoods. The burgeoning of entrepreneurial initiatives and the sustainable growth of startups would be best guaranteed if, according to Porter's theory (1998), creative firms and workers are concentrated in localized clusters rather than dispersed throughout metropolitan areas.

As shown on Neo-Nomades' portal (Figure 5), the geography of coworking in Paris is highly concentrated North of the Seine River in the 2nd, 3rd, 10th and 11th districts. This presence is a testimony of the revival of the *Silicon Sentier*, which had emerged in the Garment district (*The Sentier*) during the rise of the internet economy in the 1990s, and was regarded as almost dead in the early 2000s after the dot.com bubble bust.

From this point of view, Berlin reunites all factors for being one of Europe's capitals of coworking. After the 1990 reunification, green field and brown field real estate programs have burgeoned in the city on a scale never seen in Europe since the post-WW2 reconstruction. The cost of office space remains low compared to London or Paris. And Berlin is recognized as a vibrant, cosmopolitan, creative city (www.creativemetropoles.eu/city/berlin) whose image and brand is actively marketed by local authorities (Lange *et al.* 2008): *The Betahaus*, flagship of Berlin coworking¹¹ is often visited by delegates from foreign cities.

Figure 5. Coworking spaces in Paris. Copy from: www.neonomades.com, 16 November 2013.



¹¹ Created in 2009, it is the larger (2000 m2 and 200 coworkers) and the most famous coworking facility in Germany.

Since the middle of the 2000s, New York City has seen a strong revival of creative and tech industries. In 2009, Mayor Bloomberg launched the MediaNYC 2020 program, aimed at strengthening New York's prominence in media industries. In this context, the New York City Economic Development Corporation has brought financial support to the creation of about 20 business incubators, many of them offering coworking facility, like *The Hive at 55* (<http://hiveat55.com>), opened at 55 Broad Street in December 2009. This program provides an opportunity to refurbish industrial premises: *Harlem Garage*, *Sunshine Bronx*, and *Made in NY Media Center* are located in former factories and warehouses (<http://www.nycedc.com/service/incubators-workspaces>).

In Hackney Wick, a district of East London, the London Thames Gateway Development Corporation (LTGDC)¹² has refurbished a former print factory into a creative and entrepreneurial hub, *90 Main Yard*, which comprises a CS: *Innovation@90 Main Yard* (open in 2013, <http://90mainyard.co.uk/innovation>).

Our proposals aim ... to speed up the transition of the area into a new district hub with great character and a work/live vibrancy (Townsend 2011)

Public support to coworking is particularly active in France (Cagnol 2013a, 2013b). In Lille, *The Imaginarium* is dedicated to image creation, part of a larger complex of refurbished buildings called *La Plaine Image*, funded by Lille Métropole, the Regional Council, and the European Union (<http://imaginarium-society.org>). In Nantes, the urban development program of the old shipyards area (L'Ile de Nantes) is dedicated to creative industries and comprises a CS, *Le Karting*, managed by dot.parade, a non-profit association (www.dotparade.com). Faced with industrial and demographic decline since the 1970s, the city of Saint-Etienne has engaged in a disruptive marketing strategy based on design and related activities. In this context, the Development and Planning Public Corporation has refurbished an old armament factory, The Manufacture, which now hosts *Le Mixeur*, a business incubator and accelerator with coworking facility.

Private-public partnerships and the interest of high-tech corporations

The interest of large firms for coworking is epitomized by initiatives such as *Spark*, a business incubator and CS inaugurated by Microsoft France on March 4, 2013 in the core of the Sentier neighborhood (<http://spark.microsoft.fr>). In the same vein, Google and Orange have joined their effort in early 2013 to support the creation of *NUMA*, a new start-up incubator with 1300 m² of workspace located in the same area. Each of these giants will provide one million euros, Region Ile de France will bring 1.6 million. City of Paris and Silicon Sentier (a Paris-based digital media and Internet

¹² A public body in charge of East London regeneration and development. Created in 2004 and dissolved in January 2013.

firms association) will provide additional funding (Pontioli 2013). Opened in November 2013, NUMA hosts the new headquarters of Silicon Sentier and will see the relocation and expansion of two notorious CS, *La Cantine* (a pioneer of coworking in France) and *The Camping*, a Silicon Sentier initiative sponsored by Google aimed at hosting and mentoring young startups.

1000startups, launched in September 2013, is the latest project, and by far the largest. It endeavors to become until completion in 2016 "the world's largest digital incubator" (<http://1000startups.fr>). The project is driven and funded by Xavier Niel, founder and CEO of Iliad, the parent company of Free, a major Internet and Telecom provider, with the backing of the City of Paris, and Caisse des Dépôts¹³ as a minority stakeholder. Located in a former railway hall, the 30,000 m² facility is designed to host about one thousand creative workers. It will include several CS and a comprehensive set of services: janitorial service, restaurant, networking, mentoring, consulting, and financing (Wilmotte & Associés SA 2013).

Big companies in high-tech industries have several motives to support coworking initiatives. It may be a marketing tool aimed at improving their public profile. But the most important goal is the "connection to local entrepreneurial ecosystems" (Malecki 2011) aimed at expanding the perimeter of serendipity production outside the walls of the company. Innovation has become increasingly fast and open (Chesbrough 2003, Huizingh 2011). Given that talents and skills are less mobile than capital, it remains locally anchored. Therefore, as writes Malecki, large firms must implement "double networks" for catching, selecting, and assembling ideas and initiatives that originate outside their main R&D campuses. The funding of CS is one way to have a foot in a fuzzy, fluid entrepreneurial milieu, to feel the market pulse, to keep an eye on creative initiatives and startups, and perhaps, to find the "gold nugget".

5. An uncertain future

A bubble of CS creation may well have occurred since 2009 (Cashman 2012). Paradoxically, coworking growth may have been fueled by the recent bust of the property bubble in North America and Europe, and the resulting economic downturn. It is worth noting that Spain, where the property bubble bust was among the worst of advanced economies, has the second largest number of coworking venues in Europe and the world's highest ratio of facility per inhabitant, according to *Deskwanted* (2013). Bankruptcies, massive layoffs, and cheap office space favor the coworking movement. De Peuter (2013) and Vivant (2013) suggest that "the reality of working and producing in creative sectors is marked by precariousness". Facing grim

¹³ The financial arm of the French State, dedicated to land developpement, building and housing.

perspectives of recruitment by large service firms and given offered low salaries, creative workers are more often pushed to become freelancers, to seek asylum in CS, and to build coworking communities.

Low profitability is another factor of uncertainty. A majority (60%) of CS are not profitable, according to the Second Coworking Survey implemented by *Deskmag* (Foertsch 2011). Stillman (2011) argues that it is usual for firms still in the infancy to being not profitable. Admittedly, it took many years for Amazon, Google, and the likes to achieve profitability. But CS are not startups. Today's Internet giants began to make a return until they reached the size which guarantees network effects and economies of scale (Metcalf 1995). Indeed, *Deskmag*'s poll found that 70 percent of large CS (over 50 members) are profitable. However, many community-based, small facilities must keep occupation fees low, and cannot expect a significant up scaling of their operations. As says Coiffard (2012), a part of the value created by CS is non peculiar, and their curators must find additional resources: public subsidies, sales of services (meeting room rental, seminar organization, coffee shop), and sponsoring by larger firms, as we mention above.

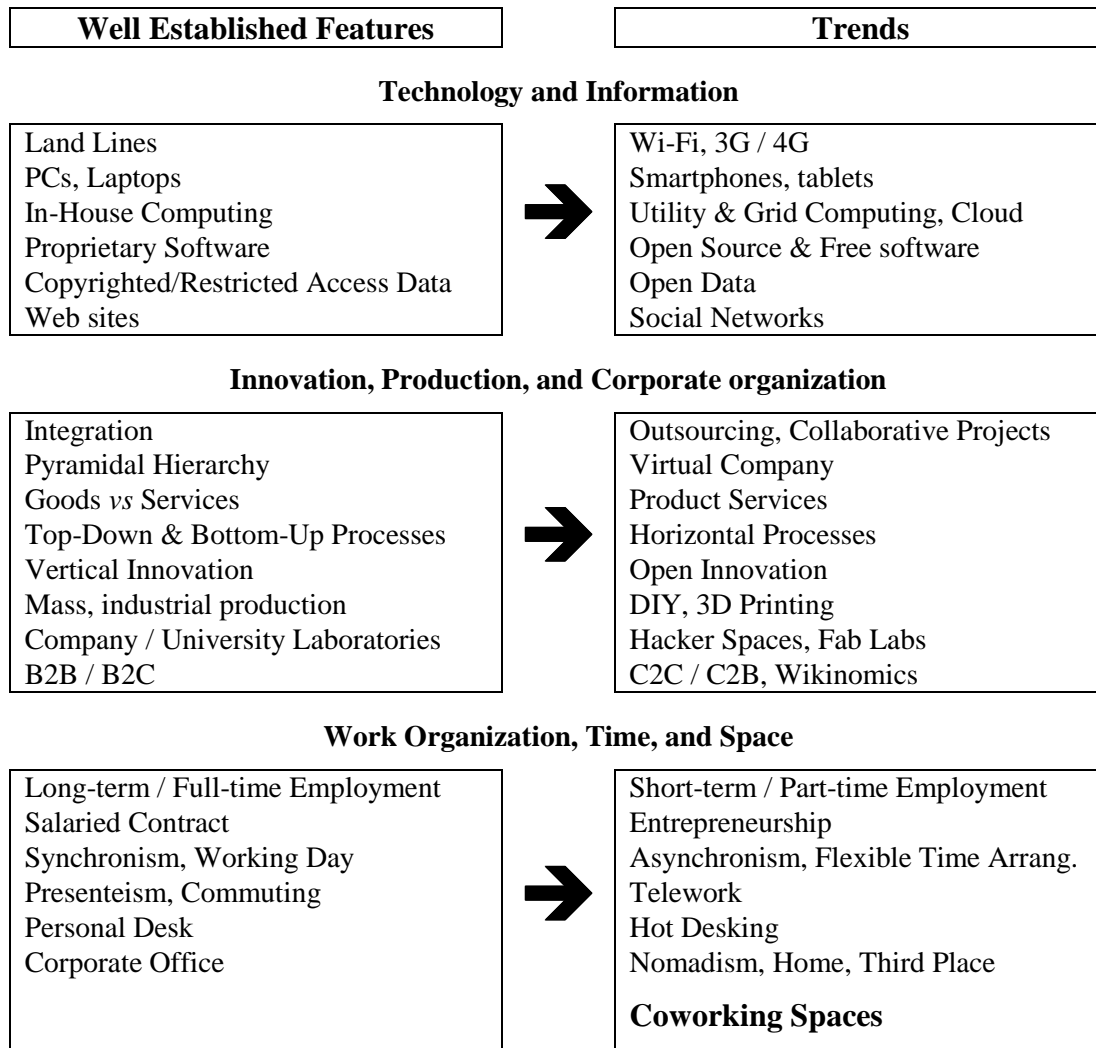
This financial weakness is the outcome of a low level of marketable value-added per worker. It must be situated in a wider context. Shaughnessy (2011) questions the actual value of the "creative class" concept for innovation and wealth creation. In the mouth of policy makers and media, he argues, creativity has more to do with "entrepreneurial opportunism" than with "deep enterprise expertise". Shaughnessy regards the flourishing of small software companies as a Darwinian process he calls "fail fast – fail cheap". In the same vein, Shane (2009) considers that "encouraging more people to become entrepreneurs is bad public policy", because small, newly created firms often feature low paid, short-tenured jobs, low value-added per worker, and little innovation. Shane considers that supporting the growth of carefully chosen existing firms would make a better return of public money. Hurst and Pugsley (2011) even write that "the vast majority of small business owners do not expect to grow... and report not wanting to innovate". In fact, the most common motive of small firm creation would not be to bring to the market a new product or service, but rather, to get non pecuniary benefits such as "being their own boss and the flexibility that small business ownership provided".

Conclusion

Although their economic significance still remains small, CS have grown to a worldwide phenomenon, and are strongly anchored in the working environment of creative industries throughout major business cities. Coworking participates to (and results from) a global process of blurring of the lines between old, well-defined categories, concepts, practices, and objects in the political, social, economic, and technological realms (Figure 6). The space/time frontiers between private and

professional life become fuzzy. Goods and services, enterprises, value chains, innovation processes, employment contracts, working time, and CS, feature uncertain perimeters. Hybrids such as third places and CS emerge from the convergence or the merger between concepts, processes and things. As a "general purpose technology" (Bresnahan and Trajtenberg 1995), information technology is at the locus of "frontier blurring" and hybridization, and has itself seen the triumph of hybrids, such as smartphones and tablets.

Figure 6. Coworking spaces and the blurring of categories



Thanks to the charm of novelty, and driven by the fashionable slogan of "building the creative city", the creation of CS has so far been a trendy activity. The emergence of a digital capitalism has generated some true pecuniary and social demand of a new kind of working space. CS planners, owners, and curators have occupied a niche whose growth potential remains unknown. The achievement of profitability remains the key issue in this regard. However, the death of the corporate office is a remote

perspective, while big companies are still actively building state-of-the-art campuses, which incorporate the ultimate IT and green tech, as well as their own internal CS.

By outsourcing the making of some creative products and services to "lone eagles" and micro enterprises, large firms reduce their permanent payroll and gets labor flexibility at little cost. The price for freedom and serendipity paid by many free-lancers and creative entrepreneurs – categories who represent the lion's share of coworking creators and users – is often precariousness: low or fluctuant income, fragile health insurance and retirement scheme.

This statement does not minimize the appeal of the CS concept within the milieu of creative entrepreneurs. CS are strongly anchored in the workplace landscape of major business cities. Policy-makers and planners who encourage or fund CS creation are often doing well, but enthusiasm must be tempered. Following Ponzini and Rossi (2010), we may suggest that the public support of CS creation is part of the "creative city" policy discourse, aimed as softening the fact that the actual locus of urban development and revitalization programs is in raising the value of real estate through the supply of brand new office buildings and premium housing programs. Created in the mid-2000s by "borderline" groups of creative workers, the concept of coworking space has to a certain extent entered the urban "growth machine" analyzed by H. Molotch (1976).

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Annex 1. Naming coworking spaces: values and rhetorical figures

Interpretation	Coworking Space Names
Source of inspiration Alchemy of creating ideas	<i>La Muse</i> (Gen), <i>Newton's Cradle</i> (Alb), <i>Sparkle</i> (Lon), <i>Spark Space</i> (NY), <i>Tech Liminal</i> (Oak) <i>Protein Studio</i> (Syd), <i>Inspire9</i> (Melb), <i>Imaginarium</i> (Lil)
Reservoir / bath of ideas Mixer of ideas	<i>Le Tank</i> (Pa), <i>Bathtub 2 Boardroom</i> , <i>Innovation Warehouse</i> (Lon), <i>Le Mixeur</i> (St-E)
Assembling people and ideas	<i>Jigsaw Renaissance</i> (Seat)
Transforming ideas in real projects: tool and factories.	<i>La Forge</i> (Li), <i>Foundry</i> (Tor), <i>Grind</i> (NY), <i>The Mill</i> (Seat), <i>York Butter Factory</i> (Melb), <i>The Code Factory</i> (Ottaw), <i>Spice Factory</i> (Chic), <i>L'Usine à Belfort</i> (Belf)
Birthplace of new firms Incubation	<i>Eclau</i> (Laus), <i>The Hatchery</i> (SF), <i>Hatch!Nest</i> (Han), <i>The Cube</i> (Lon), <i>Uncubed</i> (Denv), <i>Spacecubed</i> (Per), <i>The Hackernest</i> (Tor), <i>La Poussinade</i> (Pa)
Startups, technology	<i>Starpad</i> (Seat), <i>Geekoffice</i> (Bost)
Startup accelerator	<i>RocketSpace</i> , <i>The Reactor</i> (SF)
Connectivity, networking	<i>The Hub</i> (SF), <i>Conduit</i> , <i>Swivel</i> (Orl), <i>Conjunctured</i> , <i>Plug and Play</i> (Aust), <i>Digital Telepathy</i> (SD), <i>The BizLynks Center</i> (Atl), <i>Nexus Montréal</i>
Chat and discussion Buzz, liveliness	<i>Agora</i> (Berl), <i>Hypepotamus</i> (Atl), <i>Vibewire Enterprise Hub</i> (Syd), <i>Fluent City</i> (NY)
Training, brainstorming	<i>The White Board</i> (Seat), <i>Canvas.co/work</i> (Wash)
Hospitality, resources	<i>Igluu</i> (Utr), <i>Abri.Co</i> (Qu), <i>Enterprise Oasis</i> (Phil), <i>Milk & Broad</i> (Bost)
Collaborative work Community	<i>The Hive at 55</i> , <i>Fueled Collective</i> , <i>La Ruche</i> (Pa), <i>La Coroutine</i> (Lil) <i>Gangplank</i> (Pho)
Mutual support	<i>La Cordée</i> (Ly), <i>Camaraderie Coworking Inc</i> (Tor)
Civic engagement	<i>Citizen Space</i> (SF)
Opportunities	<i>Opportunity Space</i> (Aust)

Serendipity, nomads	<i>Roam Atlanta</i> , <i>Droplab</i> (LA), <i>The Trampery</i> (Lon)
A new breed of office space	<i>Coloft</i> , <i>Office Slice</i> (LA), <i>Studiomates</i> (NY)
Third Place, unformal meeting, conviviality Food and drink	<i>La Cantine</i> (Pa), <i>W@tercooler</i> (Bost), <i>LAWOMATIC</i> ¹⁴ (Pa), <i>Le comptoir numérique</i> (St.E), <i>PAPER + TOAST</i> (KL)
Relax, friendly atmosphere	<i>Coolworking</i> (Bord), <i>Affinity Lab</i> (Wash), <i>ZEN Coworking</i> (Tok)
Entrepreneurship values, boldness,	<i>Intrepid Labs</i> (Bost), <i>Launch/Co</i> (Berl), <i>The BizDojo</i> (Auck), <i>Proudcloud</i> (Man), <i>Ventureforth</i> (Phil)
Borderline spirit	<i>La Mutinerie</i> (Pa)
Comfortable, cosy	<i>Posh Coworking</i> (Aust), <i>The Comfy Chair</i> (SF)

Coworking space locations: index of acronyms

Alb: Albuquerque (US)	Laus: Lausanne (Switz.)	Phil: Philadelphia (US)
Atl: Atlanta (US)	Li: Liège (Belgium)	Pho: Phoenix (US)
Auck: Auckland (NZ)	Lil: Lille (FR)	Qu: Québec (CAN)
Aust: Austin (US)	Lon: London (UK)	SD: San Diego (US)
Belf: Belfort (FR)	Ly: Lyon (FR)	Seat: Seattle (US)
Berl: Berlin (GER)	Man: Manila (Philippines)	SF: San Francisco (US)
Bord: Bordeaux (FR)	Melb: Melbourne (AUS)	St.E: Saint-Etienne (FR)
Bost: Boston (US)	NY: New York City (US)	Syd: Sydney (AUS)
Chic: Chicago (US)	Oak: Oakland (US)	Tok: Tokyo (JAP)
Denv: Denver (US)	Otaw: Ottawa (CAN)	Tor: Toronto (CAN)
Gen: Geneva (Switz.)	Pa: Paris (FR)	Utr: Utrecht (Netherland)
Han: Hanoi (Vietnam)	Per: Perth (AUS)	Wash: Washington DC (US)
KL: Kuala Lump. (Malaysia)		

¹⁴ Much sophisticated pun. TIC stands for ICT in French, A *lavomatic* is a place equipped with self-service washing machines, used by people who do not have their own at home. It may be classified at a third place, in Oldenburg's sense. Labs and Work can also be found in the pun.